25X1A

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Fili.

21 November 1960

25X1A

Post Office Box 1407 Main Post Office Washington 13, D. C.

Gentlemen:

Enclosed herewith are three (3) copies of the status report of technical progress on the photographic rectifier for the month of October, 1960

A copy of the report is being submitted directly to the Contracting Officer.

Very truly yours,								
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25X1A

cc: Contracting Officer

Declass Review by NIMA/DOD

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1 November 1960

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PHOTOGRAPHIC RECTIFIER-PRINTER

Report of Technical Progress

I. Progress During October, 1960

A significant amount of assembly and testing was accomplished during October. The video system has been reworked and testing is complete until final optical tests indicate possible trouble areas. The digital system checkout is essentially complete and compatability with the "X" servo drive has been established. Checkout of the "Y" index servo and register has been completed.

Fabrication and assembly for units 2, 3 and 4 has received considerable effort. Items completed for all units were; high and low frequency amplifiers, check-pulse amplifiers, focus current regulators, 90 volt and 1.4 KV power supplies, pneumatic and vacuum valves and transportages. In addition, partial quantities of the 20 KV power supplies, X and Y deflection amplifiers have been completed. The Y index register for number 2 has been assembled and bench checkout is 90% complete. The remaining 3 consoles have been received and assembly of one for the next unit is in work.

Tape programs for 4:1 and 1:1 enlargements are complete, and the tape is punched for the 4:1 enlargement.

II. Anticipated Progress During November

System integration will continue during November. Checkout with tape commands is the next step and will take the better part of the month to complete. The estimate of systems test conclusion must be advanced to 1 February on the basis of present completion. Present manpower effort will continue and assembly and tests for units 2, 3 and 4 will continue as a parallel effort.

Project Enginder

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	Pre-Design	Design	Design Release Parts		Fabrication	Assembly		
Structure	Complete	Complete	Complete	Complete	2 Complete	l Complete		
CRT Housing	Complete	Complete	Complete	Complete	1 Complete	l Complete		
CRT Elect. Parts	Complete	Complete	Complete	1 Complete	Complete			
Track Assy., X								
Drive Lead Screw	Complete	Complete	Complete	Complete	l Complete	1 Complete		
Valve, Pneu. & Vacuum	Complete	Complete	Complete	Complete	Complete	l Complete		
Doors	Complete	Complete	Complete	Complete	Complete	Complete		
Focus Current								
Regulator	Complete	Complete	Complete	Complete	Complete	Complete		
X Deflection Amp.	Complete	Complete	Complete	Complete	Complete	1 Complete		
Y Deflection Amp.	Complete	Complete	Complete	Complete	Complete	1 Complete		
X Drive Assy.	Complete	Complete	Complete	Complete less motors	Complete	l Complete		
Film Index	Complete	Complete	omplete Complete Complete		Complete	l Complete		
Lens Board	Complete	Complete	Complete	Complete	2 Complete	2 Complete		
Platen	Complete	Complete	Complete	Complete	1 Complete	1 Complete		
Cassettes	Complete	Complete	Complete	Complete	Complete	2 Complete		
Vacuum Pump		*		1 Complete		1 Complete		
Power Supply 20kv	Complete	Complete	Complete	Complete	Complete	3 Complete		
Power Supply 90V	Complete	Complete	Complete	Complete	Complete	Complete		
Program Relay Control	Complete	Complete	Complete	Complete	Complete	l Complete		
Gurley Disc Assy.	Complete	Complete	Complete	Complete	l Complete	l Complete		
Check Pulse Transistor Amp	Complete	Complete	Complete	Complete	Complete	Complete		
HiFreq. Xsistor Amp	Complete	Complete	Complete	Complete	Complete	Complete		
Check Pulse Separator	Complete	Complete	Complete	Complete	Complete	Complete		
Sweep Linearizer	Complete	Complete	Complete	Complete	l Complete	1 Complete		
CRT Control	Complete	Complete	Complete	Complete	1 Complete	1 Complete		
Dynamic Focus	Complete	75%Compl.			1 Complete			

PHASE DIAGRAM FOR READER

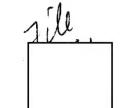
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•		Description

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	Pre-Design	Design	Release	Purchase Parts	Fabrication	Assembly
Structure	Complete	Complete	Complete	Complete	2 Complete 2 In Work	l Complete
CRT Housing	Complete	Complete	Complete	Complete	1 Complete	1 Complete
CRT Elect. Parts	Complete	Complete	Complete	1 Complete		
Track Assy., X Drive Lead Screw	Complete	Complete	Complete	Complete less motor	l Complete	l Complete
Valve, Pneu. & Vacuum	Complete	Complete	Complete	Complete	Complete	Complete
Doors	Complete	Complete	Complete	Complete	Complete	In Work
Focus Current Regulator	Complete	Complete	-Gomplete	Complete	Complete	Complete-
X Deflection Amp.	Complete	Complete	Complete	Complete	Complete	2 Complete
Y Deflection Amp.	Complete	Complete	Complete	Complete	Complete	2 Complete
X Sweep Attenuator	Complete			Complete	Complete	1 Complete
Y Sweep Attenuator	Complete	Complete	Complete	Complete	Complete	l Complete
Power Supply 20kv	Complete	Complete	Complete	Complete	Complete	3 Complete
Power Supply 1kv	Complete	Complete	Complete	Complete	Complete	Complete
FMT Drive & Servo	Complete	Complete	Complete	Complete less motor	Complete	1 Complete
Platen & Index Assy.	Complete	Complete	2 Complete	less motor	- 1	1 Complete
Film Index Drive & Servo	Complete	Complete	l Complete	l Complete	l Complete	1 Complete
PM Assy. & Video Amplifier	Complete	Complete	Complete	Complete	Complete	Complete
Optisyn Pre-Amp	Complete	Complete	Complete	Complete	Complete	Complete
Check Pulse Transistor Amp	Complete	Complete	Complete	Complete	Complete	Complete
Dodging Commutator	Complete	Complete	Complete	Complete	1 Complete	I Complete
Sweep Linearizer	Complete	Complete	Complete	Complete	l Complete	1 Complete
.CRT Control	Complete	Complete	Complete	Complete	1 Complete	1 Complete
Dynamic Focus	Complete	75%Complete	Complete	Complete	l Complete	1 Complete
Cables (Internal)	Complete	Complete	Complete	Complete	l Complete	l Complete

PHASE DIAGRAM FOR CONSOLE

				Purchase		
	Pre-Design	Design	Release	Parts	Fabrication	Assembly
Y Index Register	Complete	Complete	Complete	1 Complete	1 Complete	l Complete
Monitor Scope	Complete	Complete		Complete	Complete	1 Complete
Video Control	Complete	Complete		Complete	l In Work	l In Work
Sweep Generator	Complete	Complete		Complete	l Complete	l Complete
Power Control	Complete	Complete	Complete	1 Complete		l Complete
Program Control	Complete	Complete	Complete		In Work	
Power Supply 125V	Complete	Complete	Complete	Complete	Complete	3 Complete
Power Supply 300V	Complete	Complete	Complete	Complete	2 Complete	2 Complete
Scan Servo	Complete	Complete	Complete	Complete	l Complete	1 Complete
Scan Comparator	Complete	Complete	Complete	Complete	Complete	l Complete
Scan Computor	Complete	Complete	Complete	Complete	Complete	l In work l Complete l In work
Tape Reader	Complete	Complete		l Complete	1 Complete	l In work l Complete
Power Supply 6.3V	Complete	Complete	Complete	Complete	Complete	5 Complete
Transportape	Complete	Complete		Complete	Complete	Complete
Power Supply 28V	Complete	Complete	Complete	Complete	Complete	2 Complete
Cables (internal)	Complete	Complete	Complete	i i	1 Complete	1 Complete
Rack	Complete	Complete	Complete	Complete	1 Complete	1 Complete
					I In work	I In work

1 October 1960



PHOTOGRAPHIC RECTIFIER-PRINTER

Report of Technical Progress

Progress During September, 1960 Ι.

The video system received a majority of the engineering attention during September, and is complete and ready for final operation with the remaining equipment. The "X", "Y" and Photomultiplier Transport Servos in the Reader have been checked out in the system. The "Y" Index Register has been incorporated and the "loop" closed. This is working very effectively. Cabling is complete. Several of the power supplies for Units 2, 3 and 4 were completed.

II. Problem Areas

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Comments of last month on cathode-ray tubes is applicable again	
his month. The proposed meeting with on a STATINT	ΓL
comparable tube to the has been delayed and will be held	
his month. Since cathode-ray tubes are available for Unit 1, this	
problem had been deferred.	

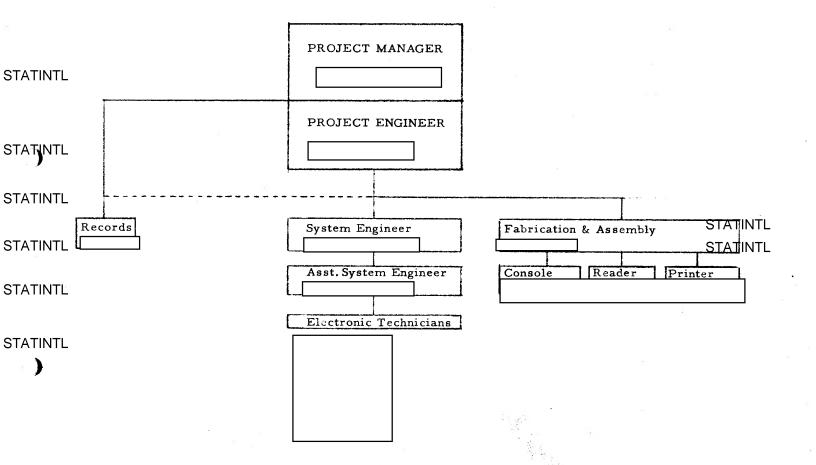
Progress Anticipated During October, 1960 III.

System checkout of the digital system will require most of the systems engineering time in October. Parallel effort to integrate the video system will be applied. The new synchronous motor for the Printer Drive is scheduled for delivery and will be incorporated as soon as F Γ L

eceived. The major effort will be applied to completing and
system testing Unit 1. Personnel not required for this will continue
work on the remaining assemblies and testing for Units 2, 3 and 4.
Preliminary program has been prepared for delivery to the
Programmer. will produce tapes for enlargement and STATINI
calibration in October.
Project Manager

HLS/p

Encls.



Approved For Release 2002/06/17 :	CIA-RDP78B04747A000600080005-3
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PHOTOGRAPHIC RECTIFIER-PRINTER WORK SCHEDULE AND PROGRESS CHART

	*				1838							1960								1
ITEM Description	WORK Description	ĴUN	วิยเ	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	jar	AUG	SEP .	OCT	NOV	DEC
	<u>DESIGN</u>			11111																*
<u>reader</u> <u>and</u> Printer	FABRICATION																<u></u>			
	TEST		,								-			11/1	111/2		11111.	12.2		×
	<u>design</u>				1									7777		l		1		
CONTROL Console	FABRICATION							777	<u> </u>	illill				11/1/1	COMPL	ETE				
	TEST													72.4			<u>Milli</u>	2		l-
	Unit 1 TEST															[
SYSTEM TEST	Unit 2 TEST																3			
	Units 3 & 4 TEST																			

PHASE DIAGRAM FOR READER

				Purchase		
	Pre-Design	Pre-Design Design Release		Parts	Fabrication	Assembly
-	Complete	Complete	Complete	Complete	2 Complete 2 In Work	1 Complete
CRT Housing	Complete	Complete	Complete	Complete	1 Complete	1 Complete
CRT Elect. Parts	Complete	Complete	Complete	I Complete		
Track Assy., X Drive Lead Screw	Complete	Complete	Complete	Complete less motor	l Complete	1 Complete
Valve, Pneu. & Vacuum	Complete	Complete	Complete	Complete	Complete	1 Complete
Doors	Complete	Complete	Complete	Complete	Complete	In Work
Focus Current Regulator	Complete	Complete	Gomplete	Complete	Complete	4 Complete
X Deflection Amp.	Complete	Complete	Complete	Complete	Complete	1 Complete
Y Deflection Amp.	Complete	Complete	Complete	Complete	Complete	1 Complete
X Sweep Attenuator	Complete	Complete	Complete	Complete	Complete	1 Complete
Y Sweep Attenuator	Complete	Complete Complete C		Complete	Complete	1 Complete
Power Supply 20kv	Complete	Complete	Complete	Complete	Complete	3 Complete
Power Supply 1kv	Complete	Complete	Complete	Complete	Complete	3 Complete
PMT Drive & Servo	Complete	Complete	Complete	Complete less motor	Complete	l Complete
Platen & Index Assy.	Complete	Complete	1 Complete	1 Complete	1 Complete	1 Complete
Film Index Drive & Servo	Complete	Complete	1 Complete	1 Complete	l Complete	l Complete
PM Assy. & Video Amplifier	Complete	Complete	Complete	Complete	Complete	Complete
Optisyn Pre-Amp	Complete	Complete	Complete	Complete	Complete	Complete
Check Pulse Transistor Amp	Complete	Complete	Complete	Complete	1 Complete	1 Complete
Dodging Commutato	Complete	Complete	Complete	Complete	1 Complete	1 Complete
Sweep Linearizer	Complete	Complete	Complete	Complete	1 Complete	1 Complete
CRT Control	Complete	Complete	Complete	Complete	1 Complete	1
Dynamic Focus	Complete	75%Comple	te Complete	Complete	1 Complete	1 Complete
Cables (Internal)	Complete	Complete	Complete	Complete	1 Complete	1 Complete

PHASE DIAGRAM FOR PRINTER

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*	Pre-Design	n Design	Release	Purchase Parts	1	-	-1
Structure	Complete	Complete			Fabrication		-
CRT Housing	Complete	Complete			Procee	l Complete)
CRT Elect. Parts	Complete	Complete	1	l l		l Complete	
Track Assy., X		Complete	Complete	l Complete	Complete		
Drive Lead Screw	Complete	Complete	Complete	Complete	1 Complete		
Valve, Pneu. & Vacuum				Jonnette	Complete	1 Complete	1
Doors	Complete	Complete	Complete	Complete	Complete	l Complete	
	Complete	Complete	Complete	Complete	Complete	Complete	
Focus Current Regulator	Complete	Commit					
X Deflection Amp.	Complete	Complete	Complete	FILL	Complete	4 Complete	
Y Deflection Amp.		Complete	Complete	Complete	Complete	1 Complete	
X Drive Assy.	Complete	Complete	Complete	Complete	Complete	1 Complete	
Film Index	Complete	Complete	Complete	Complete less motors	Complete	l Complete	
	Complete	Complete	Complete	Complete	Complete	l Complete	
Lens Board	Complete	Complete	Complete	Complete	2 Complete	2 Complete	
Platen	Complete	Complete	Complete	Complete	1 Complete	l Complete	
Cassettes	Complete	Complete	Complete	Complete	Complete	2 Complete	
Vacuum Pump	The second of th			I Complete		l Complete	
Power Supply 20kv	Complete	Complete	Complete	Complete	Complete		
Power Supply 90V	Complete	Complete	Complete	Complete	Complete	2 Complete	
Program Relay		-		Joinpiete	Complete	1 Complete	
Control	Complete	Complete	Complete	Complete	Complete	1 Complete	
Gurley Disc Assy.	Complete	Complete	Complete	Complete	1 Complete	l Complete	
Check Pulse Transistor Amp	Complete	Complete	C				
HiFreq. Xsistor Amp	- 1		Complete	Complete	1 Complete	1 Complete	
Check Pulse	Complete	Complete	Complete	Complete	1 Complete	l Complete	
C	Complete	Complete	Complete	Complete	Complete	Commission	
	Complete	Complete	Complete	Complete		Complete	
DRT Control	Complete	Complete	Complete	Complete		l Complete	
Dynamic Focus	Complete 7	5%Compl.			l Complete	l Complete	
			·				

PHASE DIAGRAM FOR CONSOLE

_	:			Purchase		
		Dogian	Release	Parts	Fabrication	Assembly
	Pre-Design	Design Complete	Complete	1 Complete	1 Complete	1 Complete
Y Index Register	Complete	-		Complete	Complete	1 Complete
Monitor Scope	Complete	Complete		Complete	l In Work	l In Work
Video Control	Complete	Complete			1 Complete	1 Complete
Sweep Generator	Complete	Complete		Complete		
Power Control	Complete	Complete	Complete	1 Complete	1 Complete	l Complete
Program Control	Complete	Complete	Complete		In Work	
-	Complete	Complete	Complete	Complete	Complete	3 Complete
Power Supply 125V		Complete	Complete	Complete	2 Complete	2 Complete
Power Supply 300V	Complete	1 .		Complete	1 Complete	1 Complete
Scan Servo	Complete	Complete			Complete	1 Complete
Scan Comparator	Complete	Complete	1 3 24 3		10	1 Complete
Scan Computor	Complete	Complete	Complete	Complete	Complete	
Tape Reader	Complete	Complete	and the state of t	1 Complet	e 1 Complete	1 Complete
-		Complete	Complete	Complete	Complete	5 Complete
Power Supply 6.3V			1	Complete	Complete	Complete
Transportage	Complete	Complete			Complete	2 Complete
Power Supply 28V	Complete	Complete	Complete	Complete	1	
Cables (internal)	Complete	Complete	Complete		1 Complete	1 1
Rack	Complete	Complete	Complete	Complete	1 Complete	1 Complete
RECK						